

Message

From: Ferguson, Doug [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=E7731719159B467E84B405A98596D9A6-FERGUSON, DOUG]
Sent: 3/11/2021 3:37:47 PM
To: i, [brad.pracheil@nebraska.gov]
Subject: FW: Summary of AltEn Sample Data Comparison
Attachments: 2021_0213_AltEn Water Sampling Results.xlsx

Importance: High

Brad,

I believe I sent an earlier version of this chart comparing different pesticide benchmarks, but this is the most recent and I wanted to make sure you had it.

Thank you,

We received analytical data for the AltEn response on Friday night. As a reminder, we collected surface water and sediment samples from five locations within the agricultural drainage ditch observed to be impacted by the release. In addition, we collected one surface water sample (sample #4) beyond the observed extent of the release. We were able to get analysis for 25 of the 31 pesticides identified by LSASD/ASB as being associated with seed corn. The lab data was shared with ASB (Mike B. and Venessa Madden) for their review and input. Venessa limited her review to the surface water sample results since comparative values are readily available for this media. Venessa finished her review today and provided the attached spreadsheet which highlights in yellow detected pesticides exceeding one or more surface water eco benchmarks. The orange highlighted values have elevated detection limits above one or more benchmark value.

There's a lot going on in the attached spreadsheet so I've summarized the highlights below:

- Four of the 31 pesticides identified by ASB as related to seed corn are also listed as CERCLA hazardous substances at 40 CFR 302.4. All sample results for these four pesticides are reported as non-detect.
- Multiple pesticides were detected in surface water exceeding one or more benchmark value within the drainage area visually observed to be impacted by the release. Sample 1B (0.3 mile from the release source) reported eight pesticides exceeding one or more surface water benchmark values.
- In general, pesticide concentrations decrease with distance from the source of the release.
- At sample location 4 (beyond the known extent of the release) only two pesticides were detected. The concentrations of these two pesticides exceeded benchmark values but were lower than concentrations reported further upstream.
- Not included in Venessa's spreadsheet is data for ammonia, which was sampled due to its association with manure. The ammonia data show decreasing concentrations with distance from the source and a relative lack of impact at sample location #4 (beyond the observed extent of the release). See below table.

	Sample 2 (at the tank)	Sample 1 (0.3 miles downstream)	Sample 3 (1.26 miles downstream)	Sample 5 (3.25 miles downstream)	Sample 6 (4.86 miles downstream)	Sample 4 (5.63 miles downstream, past observed release)
Ammonia, Nitrogen	1,200 mg/L	-	890 mg/L	840 mg/L	494 mg/L	1.5 mg/L

Path Forward for SEMD: Provide the data summary to NDEE for their consideration while they continue oversight of the PRP's cleanup efforts. No additional sampling is planned at this time.

Thanks,

Danny O'Connor
Acting Chief, Response, Removal, and Emergency Preparedness Section

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